Preventing and treating tooth sensitivity

ooth sensitivity can have a number of causes. Some of the more common culprits are caries (tooth decay), cracked or fractured teeth, trauma, tooth grinding or clenching, worn fillings or tooth enamel, and gingivae (gums) that have pulled away from the tooth roots as a result of gum disease or vigorous brushing.

In healthy teeth, enamel protects the crowns, the part of the tooth that you see above the gumline. The roots of healthy teeth are coated with a thin protective layer called "cementum." Under the enamel and the cementum is a more porous layer of tooth called "dentin." The dentin layer contains microscopic tubules or canals that connect with the pulp of the tooth. The pulp is in the center of the tooth and contains the tooth's nerve and blood supply. When irritants such as foods or liquids come into contact with the exposed dentinal tubules, or when excessive pressure is applied against a cracked tooth, a pain response can be triggered.

HOW CAN I PREVENT TOOTH SENSITIVITY?

Good oral hygiene is your best defense against most oral health problems, including tooth sensitivity. Poor daily dental hygiene allows bacteria to collect around and between the teeth. If these bacteria (plaque) are not removed, they can harden into calculus (tartar), which can build up and cause your gums to recede around the teeth. This is called "gingival" or "gum" disease or "recession." Gum recession exposes the roots of your teeth, which, in turn, leaves your teeth more susceptible to sensitivity.

Other situations that may increase your risk of gum recession include tobacco use, oral piercings (which can irritate the gums), use of some medications or even changes in female hormone levels during puberty, pregnancy or menopause.

Brushing your teeth harshly, using too much pressure or using a hard-bristled toothbrush also may cause your gums to recede, exposing the tooth's root. The American Dental Association recommends you follow a good oral hygiene routine.

■ Brush your teeth gently twice a day with a soft-bristled brush and a fluoride toothpaste.

The size and shape of your brush should fit your mouth, allowing you to reach all areas easily.

- Replace your toothbrush every three or four months or sooner if the bristles are frayed. A worn toothbrush won't do a good job of cleaning your teeth and can irritate your gums.
- Clean between your teeth with floss or another interdental cleaner daily. This helps remove plaque and food particles from between your teeth and under the gumline.
- Visit your dentist regularly for professional cleanings and oral examinations.

CAN TOOTH SENSITIVITY BE TREATED?

Tooth sensitivity can be treated. See your dentist. He or she can help identify the cause and may suggest one of several treatments. Depending on the cause, your dentist may recommend that you try a desensitizing toothpaste for use at home. These toothpastes contain compounds that help prevent the irritants from stimulating the nerve inside the tooth. Several uses usually are required before the sensitivity is reduced. Some higher-acid mouthrinses also may increase tooth sensitivity, and your dentist may recommend switching to another brand.

In-office treatments also are available. For example, fluoride gel treatments strengthen the tooth enamel and help reduce sensations that irritate the root. Other treatments, such as fillings, crowns, inlays, bonding, fluoride varnishes or desensitizing agents, can be used to repair areas of the tooth that are damaged or to cover areas that are exposed by gum recession. In some cases, when the gum has pulled away from the tooth, your dentist may recommend a surgical procedure called a "gingival graft" or "gum graft" to replace the tissue that has receded. If your sensitivity is severe or does not respond to other treatments, your dentist may suggest root canal treatment.

Talk with your dentist about your treatment options and how you can prevent tooth sensitivity. ■

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